

SEQUENCE LISTING

<110> JOUNG, J. KEITH
MILLER, JEFFREY
PABO, CARL O.

<120> METHODS AND COMPOSITIONS FOR INTERACTION TRAP ASSAYS

<130> MTV-030.01 (20021-3001)

<140> 09/858,852

<141> 2001-05-16

<150> 60/204,509

<151> 2000-05-16

<160> 91

<170> PatentIn Ver. 2.1

<210> 1

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
conserved peptide sequence

<220>

<221> MOD_RES

<222> (2)..(5)

<223> Variable amino acid; this Xaa range may encompass 2-4
variable amino acids

<220>

<221> MOD_RES

<222> (6)..(18)

<223> Variable amino acid

<220>

<221> MOD_RES

<222> (20)..(24)

<223> Variable amino acid; this Xaa range may encompass 3-5
variable amino acids

<400> 1

Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa His Xaa Xaa Xaa Xaa His
20 25

<210> 2

<211> 38

<212> DNA

<213> Unknown Organism

=

<220>

<223> Description of Unknown Organism: Lac promoter

<400> 2

ctttacactt tatgcttccg gctcgatatgt tgtgtcga

38

<210> 3

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hybrid promoter

<400> 3

ctttacaatt tatcccttgg tcggctagat ttactcgag

39

<210> 4

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative zinc finger peptide

<400> 4

Cys Cys His His

1

<210> 5

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Linker

<400> 5

Ala Ala Ala Pro Arg Val Arg Thr Gly

1

5

<210> 6

<211> 16

<212> DNA

<213> Escherichia coli

<400> 6

tcgacaagcg tgggcg

16

<210> 7
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 7
 caagggttca ggggcg 16

<210> 8
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 8
 ggctataaaa ggggcg 16

<210> 9
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 9
 tgggacatgt tgggcg 16

<210> 10
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 10
 Asn Ser Gly Ser Trp Lys
 1 5

<210> 11
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 11

Asn Ser Gly Ser His Lys
1 5

<210> 12

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 12

Asn His Gly Ser Trp Lys
1 5

<210> 13

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 13

Thr Arg Thr Asn Lys Ser
1 5

<210> 14

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<220>

<221> MOD_RES

<222> (2)

<223> Positively charged amino acid

<220>

<221> MOD_RES

<222> (5)

<223> Positively charged amino acid

<400> 14
 Arg Xaa Trp Leu Xaa Leu
 1 5

<210> 15
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Consensus
 sequence

<220>
 <221> modified_base
 <222> (2)
 <223> No clear preference

<220>
 <221> modified_base
 <222> (11)
 <223> No clear preference

<400> 15
 cnggacacgt n 11

<210> 16
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: In vivo site
 selection library

<220>
 <221> modified_base
 <222> (6)..(10)
 <223> A, T, C or G

<400> 16
 cgggannnnn g 11

<210> 17
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Illustrative
 nucleotide sequence

<400> 17
 cgggacacgt g 11

<210> 18
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
nucleotide sequence

<400> 18
 cgggacatgt g

11

<210> 19
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
nucleotide sequence

<400> 19
 cgggacacgg g

11

<210> 20
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
nucleotide sequence

<400> 20
 cgggacacgt g

11

<210> 21
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative
nucleotide sequence

<400> 21
 cgggacatgt g

11

<210> 22
 <211> 11
 <212> DNA
 <213> Artificial Sequence

<220> =
 <223> Description of Artificial Sequence: Illustrative
 nucleotide sequence

<400> 22
 cgggacacgg g

11

<210> 23
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 23
 Gln Arg Gly Asn Leu Val
 1 5

<210> 24
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 24
 Gln Lys Thr Asn Met Val
 1 5

<210> 25
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 25
 Gln Lys Tyr Asn Ile Leu
 1 5

<210> 26
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

=
<400> 26
Gln Arg Tyr Asn Val Val
1 5

<210> 27
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 27
Gln Lys Gly Asn Met Val
1 5

<210> 28
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 28
Gln Lys Gly Asn His Val
1 5

<210> 29
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 29
Gln Lys Gly Asn Met Val
1 5

<210> 30
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 30
 Gln Arg Gly Asn Lys Val
 1 5

<210> 31
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 31
 Gln Arg Gly Asn Lys Thr
 1 5

<210> 32
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 32
 Gln Leu Gly Asn Met Val
 1 5

<210> 33
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 33
 Gln Lys Gly Asn Lys Val
 1 5

<210> 34
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 34
 Gln Leu Gly Asn Lys Val
 1 5

<210> 35
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Consensus
 sequence

<220>
 <221> MOD_RES
 <222> (5)
 <223> Variable amino acid

<400> 35
 Asn Ser Gly Ala Xaa Asn
 1 5

<210> 36
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 36
 Asn Ser Gly Ala Tyr Asn
 1 5

<210> 37
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 37
 Asn Ser Gly Ala Trp Asn
 1 5

<210> 38
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 38

Asn Ser Gly Ala Phe Asn
1 5

<210> 39

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 39

Asn Ser Gly Thr His Asn
1 5

<210> 40

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 40

Asn Thr Gly Ala Tyr Asn
1 5

<210> 41

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 41

Gly Ser Gly Ala Tyr Asn
1 5

<210> 42

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 42

Gln Arg Gly Asn Lys Lys
1 5

<210> 43

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 43

Gln Arg Gly Asn Val Lys
1 5

<210> 44

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 44

Gln Lys His Asn Lys Lys
1 5

<210> 45

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 45

Gln Lys Gly Asn Tyr Lys
1 5

<210> 46

<211> 6

<212> PRT

<213> Artificial Sequence

<220> =
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 46
 Gln Lys His Asn Lys Lys
 1 5

<210> 47
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 47
 Gln Lys Gly Asn Ser Arg
 1 5

<210> 48
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 48
 Gln Ser Gly Asn Lys Lys
 1 5

<210> 49
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 49
 Gln Lys Ser Asn Leu Arg
 1 5

<210> 50
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 50

Gln Lys Ala Asn Thr Lys
1 5

<210> 51

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 51

Gln Lys Ala Asn Lys Leu
1 5

<210> 52

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 52

Gln Leu Ser Asn Lys Lys
1 5

<210> 53

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 53

Gln Pro Gly Asn Lys Lys
1 5

<210> 54

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 54

Gln Lys Gly Asn Asn Val
1 5

<210> 55

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 55

Gln Lys Ser Asn Asn Val
1 5

<210> 56

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 56

Gln Lys His Asn Leu Arg
1 5

<210> 57

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 57

His Lys His His Lys Ala
1 5

<210> 58

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 58

His Leu His His Lys Ala
1 5

<210> 59

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 59

Gln Arg Trp Leu Asn Arg
1 5

<210> 60

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 60

Gln Arg Trp Leu Arg Arg
1 5

<210> 61

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 61

Gln Asp Trp Leu Asn Arg
1 5

<210> 62

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 62

Tyr Lys Arg Asp Asn Arg
1 5

<210> 63

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 63

Trp Arg Ser Ser Leu Val
1 5

<210> 64

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 64

Trp Gln Ser Ser Lys Val
1 5

<210> 65

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 65

Trp Tyr Ser Ser Ile Val
1 5

<210> 66

<211> 6

<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 66
Phe Asp Ser Ser Arg Ala
1 5

<210> 67
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 67
Ala Arg Trp Leu Asn Arg
1 5

<210> 68
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 68
Glu Arg Trp Arg Asn Arg
1 5

<210> 69
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 69
Glu Arg Trp Arg Arg Arg
1 5

<210> 70
<211> 6
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 70

Glu Lys Trp Arg Arg Arg
1 5

<210> 71

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 71

Glu Gly Trp Arg Arg Arg
1 5

<210> 72

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 72

Glu Arg Trp Arg Lys Arg
1 5

<210> 73

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 73

Glu Arg Trp Arg Asn Arg
1 5

<210> 74

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 74

Glu Arg Trp Arg Ile Arg
1 5

<210> 75

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 75

Glu Arg Trp Arg Ser Arg
1 5

<210> 76

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 76

Glu Arg Trp Arg Val Arg
1 5

<210> 77

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 77

Glu Arg Trp Arg Leu Arg
1 5

<210> 78

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 78

Glu Lys Trp Arg Thr Arg
1 5

<210> 79

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 79

Glu Asn Trp Arg Lys Arg
1 5

<210> 80

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 80

Glu Gln Trp Arg Lys Arg
1 5

<210> 81

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Zinc finger
recognition sequence

<400> 81

Glu Arg Trp Arg Met Arg
1 5

<210> 82

<211> 6

<212> PRT

<213> Artificial Sequence

<220> -
 <223> Description of Artificial Sequence: Consensus
 sequence

<220>
 <221> MOD_RES
 <222> (2)
 <223> Variable amino acid

<220>
 <221> MOD_RES
 <222> (5)
 <223> Variable amino acid

<400> 82
 Thr Xaa Thr Asn Xaa Ser
 1 5

<210> 83
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 83
 Arg Arg Trp Leu Lys Leu
 1 5

<210> 84
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 84
 Arg Lys Trp Leu Lys Leu
 1 5

<210> 85
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 85
 Arg Lys Trp Leu Gln Leu
 1 5

<210> 86
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 86
 Arg Lys Trp Leu Arg Leu
 1 5

<210> 87
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 87
 Arg Lys Trp Leu Met Leu
 1 5

<210> 88
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 88
 Arg Lys Trp Ile Asn Leu
 1 5

<210> 89
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Zinc finger
 recognition sequence

<400> 89 =
Arg Lys Trp Tyr Gln Leu
1 5

```
<210> 90
<211> 6
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Zinc finger
      recognition sequence
```

<400> 90
Arg Ala Trp Leu Lys Leu
1 5

```
<210> 91
<211> 6
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence: Zinc finger
      recognition sequence
```

<400> 91
Lys Lys Trp Tyr Arg Leu
1 5